

Current processes supporting government investment decisions are insufficient for effective planning and analysis of investments...

Primarily focused on financial benefits (e.g., ROI) that impact the *government only*...

Non-financial benefits (results) are not directly factored into analysis...

No structure to force the development of *quantifiable measures*...

Analysis is viewed as a means to get funding, not a tool for on-going management & evaluation...

The Value Measuring Methodology provides a scalable and flexible approach for estimating and analyzing....

value, risk, and cost

and evaluating the relationships among them

### **History of Value Measuring Methodology (VMM)**

**July 2001** 

SSA and GSA took on the task of developing an effective methodology to assess the value of electronic services that would be:

- 1. Compliant with current federal regulations & OMB guidance
- 2. Applicable across the federal government
- 3. "Do-Able"

Jan 2002	VMM first articulated in <b>Building a Methodology for Measuring the</b> Value of e-Services
Oct 2002	Release of <b>VMM How-To-Guide</b> and <b>VMM Highlights</b> document by the Best Practices Committee of the CIO Council
April 2003	VMM Roll-Out, held by the Council for Excellence in Government in cooperation with the CIO Council's Best Practices Committee, OMB, and GSA

**Feb 2004** VMM is incorporated into the Strategic and Tactical Advocates for Results (STAR) Program, a joint initiative of the CIO Council and GSA

## VMM Has Been Used Successfully to Analyze and Plan Investments Across the Federal Government...

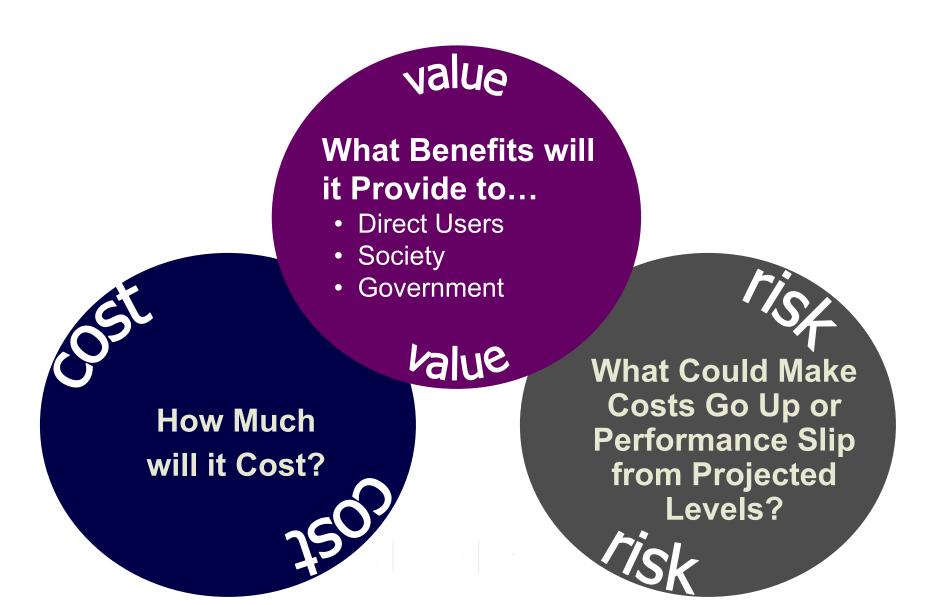
### at the enterprise level...

SSA's Benefit Value Score – single set of measures and weights used to evaluate the non-financial benefits of IT and Non-IT investments

### at the project level...

Business cases have been developed to support the funding of specific investments at GSA, the Department of the Interior, the United States Department of Agriculture, the Department of Justice, the Internal Revenue Service and the Department of Navy

## VMM Considers the Essential Factors of Decision Making...



### The Essential Factors are Critical to Each of VMM's Four Steps...

Step 1:
Develop a
Decision
Framework

### Step 2: Alternatives Analysis

Step 3: Pull the Information Together

Step 4:
Communicate
& Document

#### **Tasks**

- Identify & define the value structure
- Identify & define the risk structure
- Identify & define the cost structure
- Begin documentation

#### **Tasks**

- Identify & define alternatives
- Estimate value & cost
- Conduct risk analysis
- On-going documentation

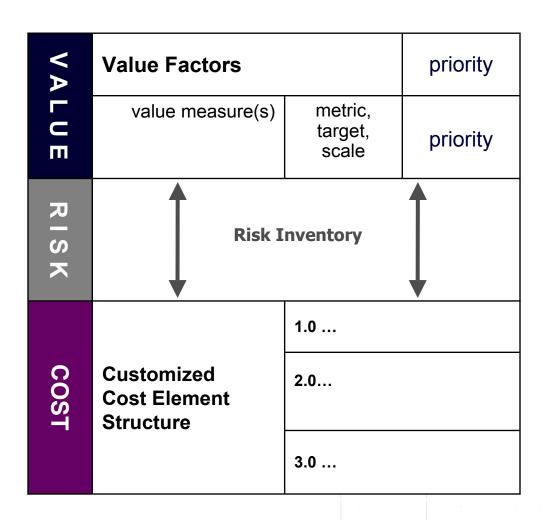
#### **Tasks**

- Aggregate the cost estimate
- Calculate the return on investment
- Calculate the value score
- Calculate the risk scores
- Compare value, cost, and risk

#### **Tasks**

- Communicate value to customers & stakeholders
- Prepare budget justification documentation
- Satisfy ad hoc reporting requirements
- Use lessons learned to improve processes

## A Decision Framework Is Tailored to Accommodate the Specific Requirements of the Project or Portfolio Under Consideration...



Define User & Organizational Needs & Priorities

Quantifiable Measures of Performance (Metrics, Targets)

Foundation for Analysis & On-going Performance Measurement

Early Consideration of Risk

### The Value Structure is Comprised of Five Value Factors

#### **DIRECT USER (CUSTOMER) VALUE**

Benefits directly realized by users or multiple user groups. Users or customers will vary based on the type of initiative being assessed. Users may include, but are not limited to, government employees, other government organizations, and citizens

#### SOCIAL (NON-DIRECT USER/PUBLIC) VALUE

Benefits not related to direct users (e.g., society as a whole)

## GOVERNMENT OPERATIONAL / FOUNDATIONAL VALUE

Order of magnitude improvements realized in current government operations and processes and in laying the groundwork for future initiatives

#### **GOVERNMENT FINANCIAL VALUE**

Financial benefit (e.g., cost savings, cost avoidance) realized by the government, including financial benefits received by the managing or sponsor agency as well as other federal agencies

#### STRATEGIC / POLITICAL VALUE

Benefits that move an organization closer to achieving its strategic goals, the priorities established by the Executive Office of the President, and congressional mandates

## The Five Value Factors

Developed based on input from the government, academics & comprehensive research

All-Inclusive

Applicable to All Government Projects

Incorporate the priorities of the PMA, OMB & GPRA

## Value Measures Define the Full Range of Desired Value in Each of the Value Factors...

VMM articulates a structured approach to measurement definition with a definition that consists of four parts:

1	Concise, Illustrative Name	Robust Reliable Service		
2	Brief Description	Service with:  Minimal or no disruptions  Consistent service regardless of normal fluctuations in demand  High fault tolerance with built-in redundancy  Adequate speed to meet business needs		
3	Performance Metrics		Target •	Scale (0-100)
	Frequency of service disruptions		None	0 disruptions = 100 1 disruption = 95 4 disruptions = 60
	Length of service disruptions  Is an executable Continuity of Operations plan in place (with a backup NOC) sufficient to pass annual certification?		10 minutes	≥ 10 min. = 90 11–14 min. = 60
			Yes	No = 0 / Yes = 100
Latency		75 milliseconds		

# Each Value Factor and Measure Is Prioritized to Accurately Reflect Stakeholder and Organizational Priorities...

VALUE FACTOR / VALUE MEASURE	Factor Wght.	Measure Wght.
DIRECT USER VALUE	28%	
User Friendliness for Managers & Travelers		30%
User-Related Process Efficiencies, Streamlining & Reduction in Administrative Burdens		24%
User Access to Information & Knowledge Sharing Capabilities		26%
Quality, Consistency & Range of Travel Services		20%
GOVERNMENT OPERATIONAL / FOUNDATIONAL	25%	
Data Accuracy & Reliability		27%
Accountability & Financial Mgmt. Reduction in Payment Delinquency		23%
Management Controls & Planning		26%
Employee Productivity		24%
STRATEGIC/POLITICAL VALUE	20%	
Compliance with Laws & Regulations		37%
Performance on Agency Mission, Strategic Goals & Government-wide Goals		29%
Quality of Services to Customers & Citizens		20%
Improved Government Image		14%
GOVERNMENT FINANCIAL VALUE	19%	
Total Cost Savings to Investment		60%
Total Cost Avoidance to Investment		40%
SOCIAL VALUE	8%	
Accountability and Stewardship of Tax Dollar & Government Assets		62%
Security of Government Systems & Safeguarding of Information		25%
Visibility into Government Processes		13%
Total	100%	

The prioritization process is facilitated by Expert Choice, an automated AHP tool.

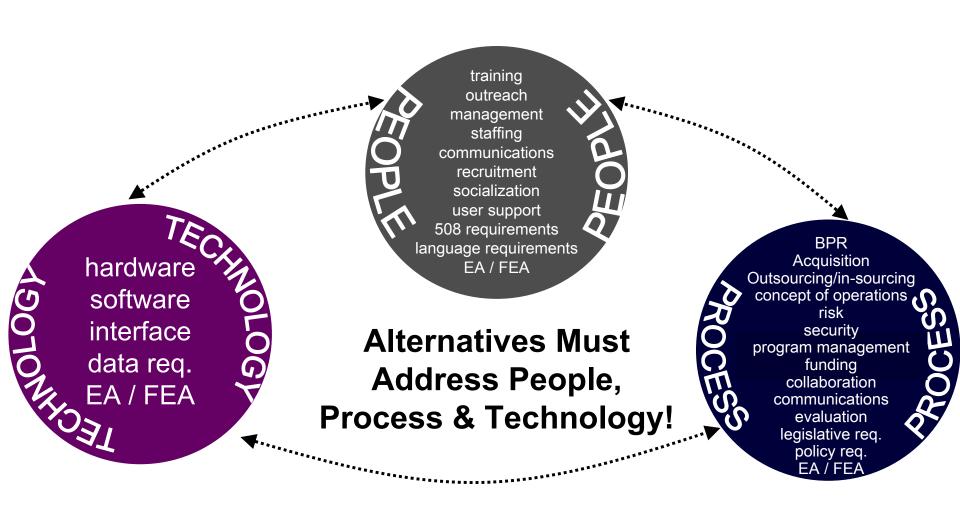
Risk and Cost Structures are Also Tailored to the Specific Investment or Portfolio

investment or Portfolio							
Risk Structur	·e	Direct User	Strategic / Political	Gov. Operational / Foundational	Social		
RISKS:	Probability	Impact	Impact	Impact	Impact		
Risk Factor 1							
Risk Factor 2		Risk will cause expected value to decrease and expected cost to					
Risk Factor 3		increase. The overall affect of risk is based on:  • The probability (likelihood) that it will occur AND					
	The severity of its impact if it does occur						

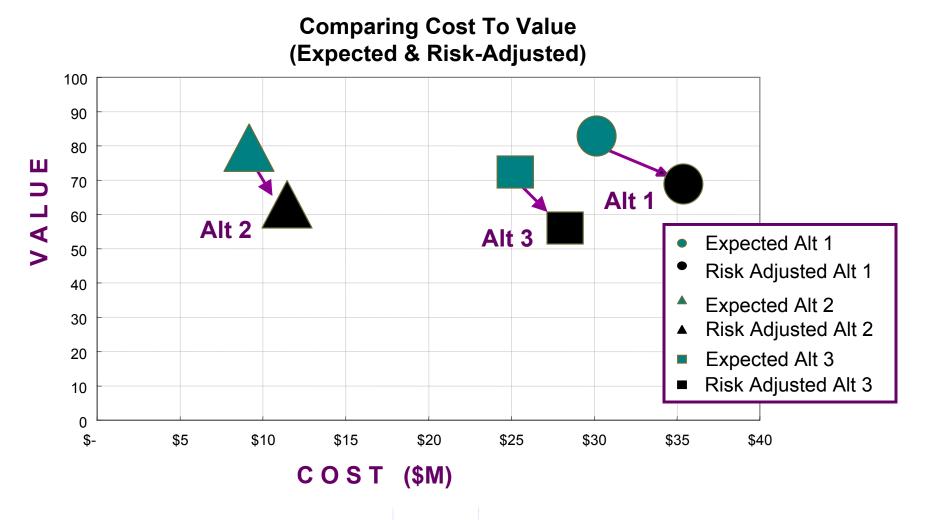
### **Cost Structure**

1.0 System Planning & Development	2.0 System Acquisition & Implementation	3.0 System Maintenance & Operations	
1.1 Hardware	2.1 Procurement	3.1 Hardware	
<ul><li>1.2 Software</li><li>1.3 Development Support</li><li>1.4 Studies</li></ul>	2.2 Personnel 2.2.1 Government 2.2.2 Contractor	3.2 Software 3.3 O&M Support 3.3.1 Government 3.3.2 Contractor	
1.5 Other		3.4 Recurring Training 3.5 Other Operations & Maintenance	

# The Decision Framework is Used to Guide the Definition and Analysis of Viable Alternatives...



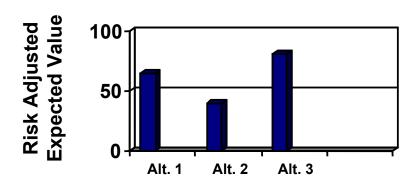
## The Output of the Analysis Can Be Used to Choose Among Alternatives or Investments...



## The Granularity of the Analysis Provides Decision Makers with the Opportunity to Focus on Specific Areas of Value...

Which alternative will provide the greatest value from the perspective of Direct Users?

Comparison of Direct User Value Performance



Which alternative presents the greatest risk in terms of Strategic / Political Value?

Risk Assessment Detail: Strategic Political Value

